LOWER JORDAN RIVER

WATER DISTRIBUTION SYSTEM ANNUAL WATER SYSTEM REPORT

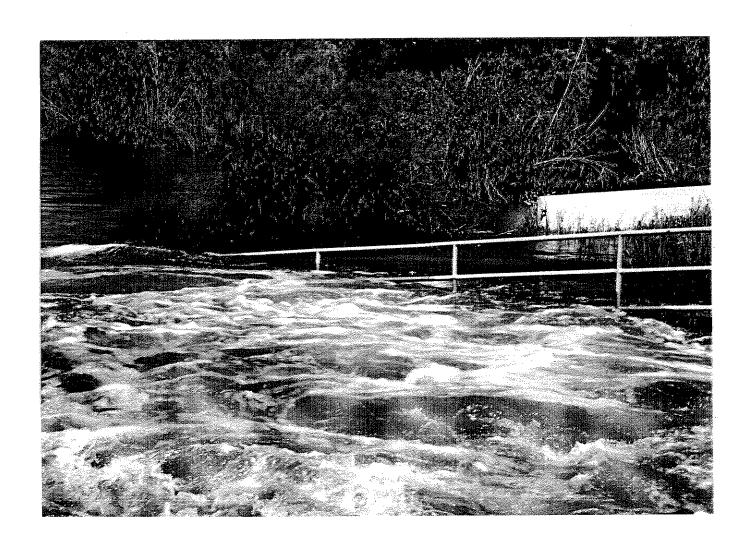
FOR: 2011

Prepared for:

STATE OF UTAH OFFICE OF THE STATE ENGINEER DIVISION OF WATER RIGHTS FIELD SERVICES – DISTRIBUTION SECTION

Prepared by: Lane H. Jensen

Water Commissioner Salt Lake City, Utah



Lower Jordan River Water Distribution System Annual Water System Report

Lane H. Jensen 3290 N. 2200 W. Salt Lake City, Utah 84116

January 17, 2012

Mr. Kent L. Jones, P.E. Utah State Engineer Department for Natural Resources 1594 West North Temple, Suite #220 Salt Lake City, Utah 84116

Dear Mr. Jones,

I hereby submit the Annual Report for the Lower Jordan River System based on my field examinations and water measurements I have made. This report is accurate within the limitations or the measuring devices currently used.

Thank∦ou,

Lane H, Jensen

Lower Jordan River

Commissioner

LOWER JORDAN RIVER WATER DISTRIBUTION SYSTEM ANNUAL WATER SYSTEM REPORT

2011

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Dailey Log

Article

THOMAS D. BASMAJIAN 5357 Cottonwood Lane Holladay, UT 84117 801-278-2468

November 29, 2011

Fred Lewis 3011 South Orchard Drive Bountiful, UT 84010

RE: 2011 Minutes of the Annual Meeting

Enclosed, please find a copy of the Minutes of the Annual Meeting of the Water Users of the Lower Jordan River, held January 20, 2011.

Feel free to contact me at my home number, 801-278-2468, if you have any questions.

Sincerely,

Thomas D. Basmajian

Secretary

cc: Lee Sims
Utah Division of Water Rights
PO Box 146300
Salt Lake City, UT 84114

MINUTES OF THE ANNUAL MEETING

OF THE WATER USERS OF THE LOWER JORDAN RIVER

The annual meeting of the Water Users of the Lower Jordan River Distribution System and representatives of the Division of Water Rights was held Thursday, January 20, 2011, in a conference room of the Natural Resources Building, 1594 West North Temple, Salt Lake City, Utah. Present at the meeting were Lee Sim, Mike Silva, Teresa Wilhelmsen, Aaron Spencer, LaVal Drechsel and Ben Anderson, Utah Division of Water Rights; Fred Lewis, Lower Jordan Water Chairman; Lane Jensen, Lower Jordan Water Commissioner; John Larsen, Upper River Commissioner; Dick Gilbert and Patrick Kelly, Ambassador Duck Ciub; Rich Hansen and Eric Anderson, Utah Division of Wildlife Resources; Thomas Basmajian, Lower Jordan Water Secretary; Beau Clements, New State; Charles F. Gillmor, Gillmor Livestock Corp.; Joe Polidori, North Point Duck Club; Mike Freeman and Cory Angeroth, US Geological Survey; Van King, Rio Tinto-Kennecott; Rich Judson and Dan Drumiler, Salt Lake County.

Fred Lewis served as the Chairman of the meeting; Thomas Basmajian served as Secretary.

The Minutes of the Annual Meeting held January 19, 2010, were read by Thomas Basmajian and which upon motion made to accept and duly seconded were unanimously approved.

Fred Lewis presented the Summary of Legal Actions 2010 and indicated there were no issues the past year that required legal assistance. Mr. Lewis recommended that since no legal action has been required in a number of years, he would like to cancel the bank account reserved for legal action and transfer the remaining funds to a general account for the use of water users of the Lower Jordan district system. A motion was made to accept, duly seconded and unanimously approved.

The 2010 Annual Commissioner's Report of the Lower Jordan Water Distribution System was then distributed.

The report of Commissioner Lane Jensen was given and reviewed. It was reported the repairs to the Goggin Drain have been completed. However, a flood gate control drill is required to be purchased pertaining to the work completed on the drain. It was agreed that Lane Jensen would complete the purchase of the drill. Also, there was a correction noted, the compromised release from Utah Lake was on February 3, 2010, as opposed to February 4, 2010. The Commissioner further reported on the United States Geological Survey (USGS) gauge. The surplus canal gauge will be replaced and moved downstream for improved performance. The committee acknowledged Lane Jensen for providing a thorough and detailed report, and stated that \$250 will be placed in the budget for the expenses on the report.

Lee Sims then reported there is a proposed 7% cut to the Division of Water Rights budget, which could result in the loss of up to six engineers. If this were to happen it could impact the timeliness of response of the Utah Division of Water Rights.

Mike Silva presented the Lower Jordan River Distribution Engineer's Report. There was discussion about the potential early release prior to the Utah Lake compromise. It was determined this would be possible with the new equipment scheduled to be installed this year. No recommendations have been made at this time and it was agreed to discuss the issue at the next board meeting.

Mike Silva then presented the 2010 financial report which upon motion made to accept and duly seconded was unanimously approved.

After discussion of the 2010 budget the following 2011 budget and assessment was moved to accept, duly seconded and unanimously approved:

LOWER JORDAN RIVER DISTRIBUTION SYSTEM

2011 BUDGET EXPENDITURES

Description of Budget Item	Amount Approved
Salary – Water Commissioner	12,100.00
Social Security - Water Commissioner	926.00
Retirement - Water Commissioner	2,132.00

Insurance Premiums - Water Commissioner	138.00
Travel Expense - Water Commissioner	9,000.00
Annual Report	250.00
Secretarial Expense	100.00
Committee Expense	200.00
Telephone Expense	500.00
" Contractual Services	350.00
Miscellaneous Expense	5,500.00
State Engineer Assessment	1,660.00

TOTAL 2011 BUDGET

32,856.00

The 2011 assessments are to be in the amount of \$25,000.00, the assessments to be computed on the same basis as in the past, i.e., first computation of the Brighton North Point's share, the balance to be assessed one-half to the river users and one-half to the surplus canal users, in the proportion of rights claimed, with a minimum of five dollars, actual computations to be made by the Division of Water Rights.

In connection with the distribution of water for the coming year the following resolutions were duly motioned, seconded and unanimously approved:

RESOLVED: That in the event of low water this year, "low water" being defined as below 325 second feet of water owned by users below the diversion between the Jordan River and the Surplus Canal and excluding water not owned by users below that diversion point, the water owned by users below the point of diversion between the Jordan River and the Surplus Canal is to be divided one-half to the river and its users and one-half to the Surplus Canal and its users for the water year 2011 without prejudice to any of the legal rights of the parties involved.

RESOLVED: If the foregoing allocation is not acceptable in operation then corrective action will be taken within twenty days after notice to the Water Commissioner. Any one of the following river users, New State, Inc., Farmington Bay WMA, Pacificorp Energy or any other aggrieved river user may request that this resolution be adjudicated in a court of law.

RESOLVED: That the Committee of the Lower Jordan Water Users Association be and it is hereby authorized and directed to take such steps as are necessary or appropriate to effectuate the foregoing resolutions.

BE IT FURTHER RESOLVED: That the foregoing three resolutions with applicable updates for each successive year shall be and remain in full force and effect for later water years until further legal resolution by the Lower Jordan Water Users Association.

It was the consensus of the body that a reference to the foregoing resolutions with applicable updates of the water years applicable should be included in the minutes of the annual meeting of the Association each year.

Upon motion duly made, seconded and unanimously carried, the following persons were named to act as members of the Lower Jordan Water Users Association Committee for the coming year and until their successors are elected or appointed:

Dick Gilbert 4071 Minuet Court West Valley City, UT 84119

Secretary – Thomas D. Basmajian 5357 Cottonwood Lane Holladay, UT 84117

Mike Stangl 90 E. 7200 S., #200 Midvale, UT 84047

Claudia Conder Utah Power & Light Company 1407 West North Temple, Suite #110 Salt Lake City, UT 84116

David Hinckley 3500 North 2200 West Salt Lake City, UT 84116

Chairman – Fred Lewis 3011 South Orchard Drive Bountiful, UT 84010

Elliott Christensen 40 East South Temple, #300 Salt Lake City, UT 84111

Bryan White 2527 South Breeze Drive Magna, UT 84044

Richard Hansen Division of Wildlife Resources 2004 North 1400 West

Clinton, UT 84015

Upon motion made, duly seconded and unanimously approved, Mr. Lewis remained Chairman and Mr. Basmajian, Secretary, of the Committee.

There being no further business the meeting was adjourned.

Secretary of the Meeting

COMMISSIONER'S REPORT 2011

This year started out with concern over the heavy snow pack received over the winter. I was in contact with the Salt Lake County Flood Control, Mike Silva, John Larsen, Salt Lake International Airport and the duck clubs. In early February it was apparent there would have to be measure's in place to prepare for heavy water flow into the Jordan River and Surplus Canal.

I was contacted by John Larsen on February 22nd and was told he would be releasing water from Utah Lake. This required me to monitor the Jordan River daily and open and close gates to remove the debris on both the river and the Goggin. I contacted County Flood Control the first week in March because the Goggin was plugged.

In April, I met with the duck club's and discussed what we could do to prevent damages. The first plan was to cut dikes on the Surplus Canal to force the water back into the Googin. This idea was dismissed because we all decided to sand bag the Husted Dam and force the water out towards the Goggin without impacting all of the clubs and breaching dikes. The Husted Dam was sand bagged on April 23rd with the help from all of the duck clubs.

The month of May was spent trying to monitor the water levels. I received calls daily from the ranchers, duck clubs, and airport. I left a backhoe at the Goggin to clean it to keep the water flowing. The Duck Club Road from the International Center was submerged in 8" of water by the middle of May. The water had reached the top of the sand bags at the Husted Dam. The water stayed in the area surrounding the Husted Dam and no dikes had to be breached.

In June the water slowly started receding. I was then able to release more water into the Jordan River.

By July, I released more water into the Jordan River and pulled boards on the Husted Dam to divert water into the duck clubs.

In August, the road was repaired from the flooding and water levels returned to normal for that time of year.

I received a call on September 10th of a substance on the surface of the Jordan River. The river was shut down until it was determined what had spilled and the source of the spill. I notified the local ranchers to shut down their pumps. I was called the next day and was told to open both bays on the river to take water from the bottom so the substance would not go down the river. Attached is an article regarding the substance in the river.

December 2nd I received a call from John Larsen to tell me the river would be shut off for

seven or eight days for repairs. I called Mr. Larsen after a week to confirm a date when the water would be turned back. I was told the river would not be turned back in for another two to three weeks. I contacted all duck clubs again, so they could try and contain the water they had. I contacted Mike Silva and told him the situation. He made a call to Mr. Larsen and was told the water could not be opened. This required me to spend two days trying to block off the Goggin. The screw gates on the Goggin will not seal, therefore 15 C.F.S is lost. I put sand bags and tarps down to seal the gates to slow down the leakage. The head gates on the Goggin need to be repaired.

I think with all of the flooding we had that things worked out very well. I would like to thank the Salt Lake County Flood Control and duck clubs for all of the help during this time. Their help and combined efforts enabled me to keep the flooding under control with minimal damage.

Sincerely,

Lane H. Jensen Water Commissioner This article appeared in the Salt Lake Tribune on September 13th. I had received a call on September 10th of a film substance on the surface of the water. The river was shut down and I re-opened the gates on September 11th.



Photo courtesy of Mark Bednarik, Salt Lake Fire Department

Workers remove absorbent booms from the Jordan River after finishing cleanup of a spill Saturday. The spilled substance has been identified as mineral oil.

Mystery substance in Jordan River identified

By SHEENA MCFARLAND and ERIN ALBERTY

The Solt Lake Tribune

The Salt Lake Valley Health Department is investigating a South Salt Lake business as the possible source of mineral oil that spread over several miles of the Jordan River last weekend.

Department spokesman Jeremy Roberts would not identify the business, but he said water tests led investigators to a ditch that runs from the South Salt Lake storm water system near 3500 South, through the Central Valley Golf Course and into the river. Crews are now taking samples from drains near the suspected business, Roberts said.

The mineral oil was spotted on the river Saturday in Salt Lake City. It had caused a dull sheen on the water. Fire and public utilities crews worked throughout the weekend to remove it from the waterway by laying down absorbent booms. All of the booms were removed by Monday morning, and the water is flowing again through gates that were closed during the weekend, said Salt Lake City Fire Capt. Mark Bednarik. There is no more mineral oil on the surface of the water.

The mineral oil was not corrosive or flammable, and it mixed with the water, making it difficult to determine how much had leaked into the river and flowed at least to 1500 South.

January 2012
Prepared by: Mike Silva

Page 1 of 4

Needless to say 2011 was an unusually high year for water. Lane finished his second year as water commissioner with much success. This year record amounts of water ran well above normal for an extended duration for most of the season. Reviewing the graphs reveals how the significant volume experienced this year. We dodged a bullet on flooding with the runoff coming at high rates from the tributaries but not spiking due to the slow warm up. See the attached article from KSL explaining flow limitations on the lower river.

The gates on Utah Lake were left open allowing the Jordan River to run most of the summer and well into the fall. Gates were shut briefly in early December 2011 to accomplish some work on the upper system; there was a delay in opening them due to a lower water year being forecasted. John Larson the UL/JR commissioner is anticipating high levels in Deer Creek, Jordanelle, and Strawberry reservoirs to be drawn down some depending on snowpack.

Big problem with the Utah Lake outlet gates is the cost of opening, the hoist mechanisms do not work and the gates need to be lifted with a crane, so it's all or none.

Communication between John Larsen (the UL/JR commissioner) and Lane is very important to the system. Any change in Utah Lake releases has impacts that need to be anticipated on the Lower Jordan, by either holding or releasing water. Just prior to the gates being opened on Utah Lake Last year (2011) I assisted Lane with pulling the slide gates on the Goggin Drain. Again this was well coordinated between the commissioners; and always more warning is better to allow for preparations and holding water.

I would like to recognize Lane's diligence and I believe his efforts are most commendable. He gets the job done and knows what he is doing. Gayle Jensen has been diligent in entering data and compiling this report. A direct indication of the team effort is contained in this report delivered today.

Data Reporting

USGS operates 3 stations on the system, we get data from, these are:

- 1. 17th south gauge on the Lower Jordan USGS: 10171000 from Surplus Canal
- 2. 21st south measurement of the Surplus canal. USGS: 10170500 (below the dam)
- 3. Goggin Drain USGS: 10172630

Salt Lake County operates the Stream Gauge on the Jordan River at 1650 West 500 North, I am working on getting that data along with others included in our report. As an automated download into our system. This will better reflect total Jordan River water the system handled.

The Division of Water Rights Water operates The Cudahey Lane gauge. It worked most of the year except with October data not being reported due to battery problems, values in the report shown as "100" are estimated to make the record complete.

Although all automated readings are not accurate 100% of the time, they are for the most part pretty close. Logs or debris that disrupts flow around the sensors causes most of the inaccuracy. USGS gauge data appearing in our records provided in the tables is considered provisional at this time. See the graphs provided

What's critical about these measurements are: combined they account for the majority of the water that is managed by the water commissioner. I reviewed the previous years for reference and compiled that data on the attached pages.

January 2012

Prepared by: Mike Silva

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There are additional tributaries that have automated sensors:

- Red Butte Creek: USGS Gauge 10172200 (enters at 900 South)
- Automated Sites Measured by SL County: http://www.pweng.slco.org/flood/streamFlow/index.cfm
- Jordan River at 500 North, (first time for data, in this years report)
- City Creek at Memory Grove
- Red Butte Creek at 1600 East
- Emigration creek at Rotary Park
- Mill Creek at 460 West, & Mill Creek at Canyon Mouth
- Parley's Creek at Suicide Rock
- Big Cottonwood Creek at 300 West
- Little Cottonwood Creek at 300 West
- Unmeasured: Numerous storm drain inlets from the Salt Lake City
- Unmeasured: Wastewater from Sewage Treatment plants

Measurement Checks:

In 2010, Utah State University Water Lab provided calibration service on the 21st South- Surplus Canal, the 17th South – Jordan River and Cudahey Lane Gauges. Lane worked with them on Ambassador Cut, Husted Dam and Goggin which were also measured. For the most part the gauges were operating within tolerances and 90% accurate or more. The final calibration reports are available.

Challenges During 2011

Goggin Drain Control Works: (some repeat)

There are three sets of gates that release water from the Surplus canal to the Goggin Drain. The north set consists of six bays of gates in sliders that are raised using a block and winch. Next are the County's radial gate, then two slide gates; all which operate with gearboxes. Problem with the gates is they don't completely seal allowing up 10-20 CFS through when water needs to be held.

The gearboxes on these last 3 gates require a county owned electrical gearbox tool to operate. If the tool is not available, then a Track-hoe has to be mobilized and shafts unbolted to lift the gates. Either way this requires considerable effort and coordination to raise the gates when simply having the tool would facilitate opening and closing. The county has been good about working to open these gates when needed. Note: one of slide gates had a bent shaft, is now repaired.

Problems will become apparent when weather conditions combine to create emergencies, hinder access for large equipment and county crews are not available or preoccupied with other priorities. This could be when the need to operate gates is most critical. Relying on the current methods may hinder the ability to operate these gates, and potential exists to create significant problems and liability for the water users. The water commissioner should get a backup gearbox tool to run the gate when needed.

January 2012

Prepared by: Mike Silva

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Delinquent Accounts:

There are 5 accounts with the highest at \$55. Some ownership changes and addresses need to be updated and/or researched before they are resolved. If you have any information on the delinquent listing please let me know. Keep in mind the unpaid-uncollected amounts deplete the reserve and become a burden to the system that the paying users must support.

Red Butte Oil Spill:

This spring, Chevron finished the reported \$2.5 million oil spill cleanup that started in June 2010, and Liberty Park and the lake was re-opened in Mid May. Flows from Red Butte resumed on a more normal basis since the cleanup was "done". Wildlife resources added 3000 Bonneville cutthroat trout in November and plans to do this again in 2012.

Article from KSL on Flow limits & protection from flooding (May 28,2011):

-- Court Order may force Utah Lake levels to rise, by John Holenhorst

SALT LAKE CITY -- A nearly-forgotten court order from 1985 may force the waters of Utah Lake to rise higher than they have in a quarter-century. The lake is already unusually high and it's edging onto surrounding private property. But in coming weeks, it's likely to go even higher because the court order places a limit on the flow of the Jordan River. In essence, the court order trades off flooding in one area in favor of flooding in another.

The court order tells me that I need to do that.—Kent Jones

A crucial measurement is made at the point where the Jordan River flows northward under 2100 South in Salt Lake City. If the flow rises to 3400 cubic feet per second (cfs), state officials are required to stop it from rising further. And that will push Utah Lake even higher. "The court order tells me that I need to do that," said Utah's state engineer, Kent Jones.

As flood threats go, it's not the most significant worry in the state. But the situation illustrates how officials are trying to juggle huge volumes of water in various waterways and reservoirs in an effort to get snow out of the mountains with as little damage as possible. That task can be a difficult one since decisions have to be made in a complex legal framework designed to protect conflicting interests.

I think that was a good compromise and I think it's going to work fairly well trying to balance the protection to the landowners around Utah Lake, while still giving protection to the landowners along the Jordan River. Kent Jones

The Jordan River is a small piece of the puzzle, but in this case, state officials say they have no flexibility.

Most of the water in the Jordan River comes from Utah Lake. Control gates at the lake's north end are currently wide open. The flow of the Jordan at the Salt Lake City measurement point is currently 2,130 cfs, well below the legal limit. During a recent warm period, though, melting snow entering Utah Lake and exiting through the gates has increased the Jordan's flow to almost 3,000 cfs. A few days with temperatures

January 2012 Prepared by: Mike Silva

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in the 80s and 90s could easily push the flow to 3,400 cfs, putting the court order front-and-center for the first time in 26 years.

Many landowners, and even water officials, are unaware of the court order, Jones said. It was issued in the 1980s when there was a big mountain snowpack. Utah Lake property owners got into a court battle with Jordan River property owners and water-users and the result was a negotiated court-approved settlement that dictates lake levels and a limit on river flows.

"I think that was a good compromise and I think it's going to work fairly well trying to balance the protection to the landowners around Utah Lake, while still giving protection to the landowners along the Jordan River," Jones said.

The lake is currently 1.7 feet above the compromise level agreed to in 1985, but that limit is trumped by the limit on flows in the Jordan River. If the gates are closed to stop the river from rising, Utah Lake could rise another two feet.

Many farms and ranches bordering the lake in Utah County could lose acreage. But the tradeoff is less flooding along the river in Salt Lake County.

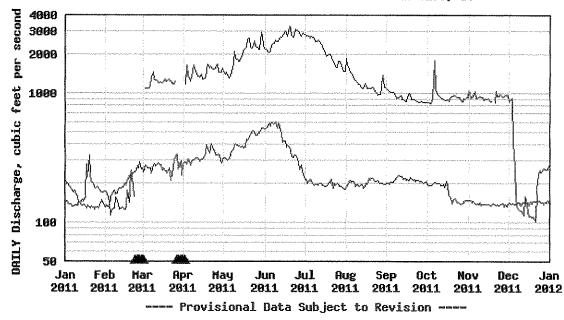
The lake's rising surface has already inched its way past the fence-line of Stan Roberts' yard in a Saratoga Springs subdivision. "This is the highest I've ever seen the lake level," Roberts said. "In fact, it's coming up into the lawn area. It's infiltrated the lawn. And so it's a little swampy down there below.

Roberts' home, though, is at least 20 feet higher than any conceivable rise of the lake. "Not a worry," he said. "Not to me."

Jones, whose job as state engineer makes him one of the most important water officials in the state, has a generally optimistic view about the flooding picture statewide. He believes many lessons were learned during the high-water years of the 1980's and a huge amount of planning and preparation has set the state up for success in handling the snow-melt.

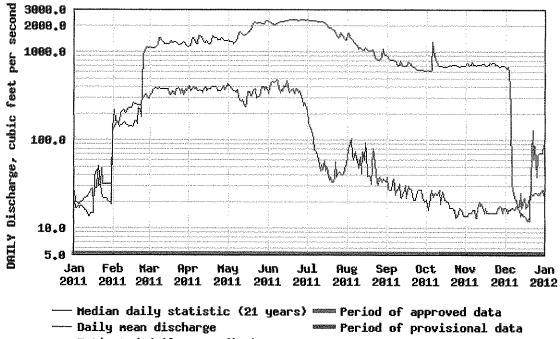
"I am quite confident that we're going to be able to get through this," Jones said. "I think we will see some problems, but I don't think it's going to be overly serious."

USGS 10170500 SURPLUS CANAL @ SALT LAKE CITY, UT



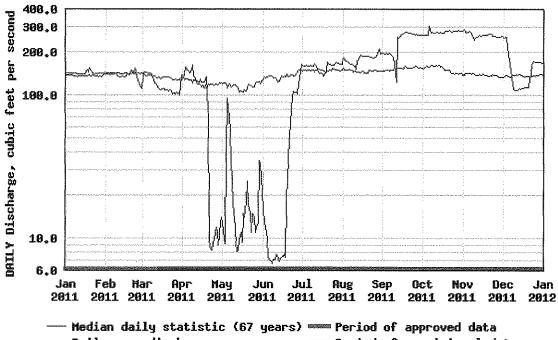
- —— Median daily statistic (67 years) —— Estimated daily mean discharge
- Daily mean discharge ▲ Equipment malfunction

USGS 10172630 GOGGIN DRAIN NEAR MAGNA UTAH



—— Estimated daily mean discharge

USGS 10171000 JORDAN RIVER @ 1700 SOUTH @ SALT LAKE CITY, UT



— Daily mean discharge — Period of provisional data



State of Utah

DEPARTMENT OF NATURAL RESOURCES Division of Water Rights

MICHAEL R. STYLER Executive Director

KENT L. JONES

State Engineer/Division Director

LOWER JORDAN RIVER DISTRIBUTION SYSTEM TRUST FUND 2011 Financial Statement

A. BEGINNING BALANCE

January 1, 2011

\$19,398.84

B. RECEIPTS

1.	Assessments:	\$24,985.89
2.	Delinquent Penalties:	1.00
	Previous Assessments & Penalties:	27.08
4.	Transfers & Adjustments:	0.00
	Annual Interest Earned:	121.57
	Cratem Peimhursements:	1,492,93

TOTAL RECEIPTS

26,628.47

C. EXPENDITURES

1.	Budgeted Expenditures:	25,715.60
2.	Unbudgeted Expenditures:	0.00
З.	Transfers & Adjustments:	0.00

TOTAL EXPENDITURES

25,715.60

D. ENDING BALANCE

December 31, 2011

20,311.71

SUBMITTED BY :

Kent L. Jones, P.E.

State Engineer

DATE

PREPARED BY:

Dennis Carroll

Budget & Accounting Officer

LOWER JORDAN RIVER DISTRIBUTION SYSTEM 2011 Budget Expenditures

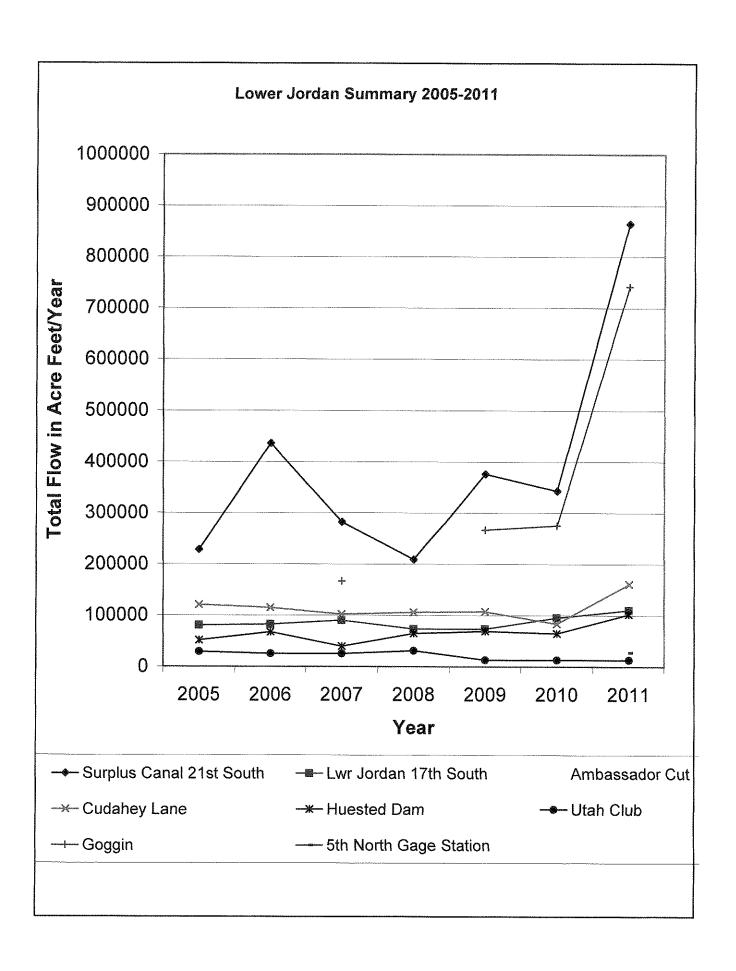
Item No	Item Description	2011 2011 Amount Amount Budgeted Expended		2011 Amount Reimbursed	2011 Item Balance	
	Jensen, Lane					
1	Salary	12,100.00	12,100.00	0.00	0.00	
2	Social Security	926.00	925.65	0.00	0.35	
3	Retirement	2,132.00	1,571.01	0.00	560.99	
4	Insurance	138.00	108.94	0.00	29.06	
5	Travel Expense	9,000.00	9,000.00	0.00	0.00	
6	Secretary Expense	100.00	100.00	0.00	0.00	
7	Committee Expense	200.00	0.00	0.00	200.00	
8	Telephone Expense	500.00	0.00	0.00	500.00	
9	Contract Service	350.00	0.00	0.00	350.00	
10	Miscellaneous Expenses	5,500.00	0.00	1,492.93	6,992.93	
11	State Engineer Assessment	1,660.00	1,660.00	0.00	0.00	
12	Annual Report	250.00	250.00	0.00	0.00	
	Totals :	32,856.00	25,715.60	1,492.93	8,633.33	

LOWER JORDAN RIVER DISTRIBUTION SYSTEM 2011 Total Assessment Amount: \$25,000.00

LOWER JORDAN RIVER DISTRIBUTION SYSTEM 2012 Proposed Budget Worksheet

Item No	Item Description	2011 Amount Budgeted	2011 Item Balance	2012 Proposed Budget		
	Jensen, Lane					
1	Salary	12,100.00	0.00			
2	Social Security	926.00	0.35			
3	Retirement	2,132.00	560.99			
4	Insurance	138.00	29.06			
5	Travel Expense	9,000.00	0.00			
6	Secretary Expense	100.00	0.00			
7	Committee Expense	200.00	200.00			
8	Telephone Expense	500.00	500.00			
9	Contract Service	350.00	350.00			
1.0	Miscellaneous Expenses	5,500.00	6,992.93			
11	·	1,660.00	0.00			
12	Annual Report	250.00	0.00	And the second s		
			A			
9 10 11	Contract Service Miscellaneous Expenses State Engineer Assessment	350.00 5,500.00 1,660.00	350.00 6,992.93 0.00			

Account Number	Billing Entity Billing Contact		Amount Due
101139			11.55
101174	WICKELSON, PAUL B. AND SHEA AND I	ARSEN, GILES	13.56
101181	TUKUAFU, SULIASI & SOLATE		54.29
101189	GOLD MEDALLION CUSTOM HOMES		5.50
101192	MBA Electric L.C.		20.47
101197	HAIR, FLOYD		11.55
	7.5		***************************************
	Tot	cal Amount Due :	116.92



LOWER JORDAN RIVER 5TH NORTH GAGING STATION

COMMON DESCRIPTION: SL CITY GAGING STATION AT 5TH NORTH

DIVERTING WORKS: MEASURING DEVICE:

RECORDS RATING: Unrated

LOCATION: 420899.80 East, 4514588.72 North (NAD27 UIM Coordinates)

	CALENDAR YEAR 2011 Mean daily discharge in CFS											
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ocr	NOV	DEC
01	185.9	181.7	155.4	221.3	282.6	482.2	399.5	381.0	259.8	313.0	442.3	324.9
02	181.1	173.8	174.5	249.4	277.2	467.2	388.0	293.4	253.3	310.6	387.3	337.9
03	182.8	180.7	200.1	416.7	285.8	475.6	376.0	295.0	252.7	308.7	381.5	334.5
04	183.7	178.0	177.5	287.5	311.1	464.1	372.1	269.3	252.7	313.3	397.7	298.6
05	183.7	178.4	173.6	269.6	383.0	445.2	367.6	263.4	247.6	340.8	430.5	
0.5	100.7	±,0.4	275.0	200.0	303.0	773.2	307.0	203.4	247.0	340.0	430.5	260.3
06	178.6	177.7	229.6	296.6	403.3	457.7	361.4	254.9	256.0	551.0	390.4	191.5
07	177.7	200.1	258.1	400.2	402.7	465.7	351.0	250.3	250.2	388.0	383.7	177.5
80	176.8	186.4	255.6	439,1	457.9	464.4	347.6	247.2	243.3	381.4	354.3	154.3
09	179.0	162.6	196.8	396.3	425.3	465.6	337.7	244.7	241.8	373.4	321.0	138.6
10	177.7	161.6	177.0	360.5	370.0	445.8	366.6	240.0	256.9	372.4	324.5	134.5
				500.5	5,010		300.0	270.0	230.3	3/2.4	324.3	1.34.3
11	174.7	160.5	172.2	325.3	387.4	410.9	342.4	215.0	172.8	374.0	332.6	134.2
12	175.3	159.9	171.6	318.6	373.6	408.7	314.0	251.0	320.3	373.5	344.8	135.3
13	175.3	159.6	171.1	348.9	379.8	405.0	298.6	254.3	322.9	370.9	368.5	136.9
14	179.9	158.9	171.1	389.1	404.3	421.9	287.4	259.8	326.0	370.0	348.2	148.8
15	176.3	158.2	165.6	312.2	417.6	393.0	277.9	281.1	341.3	368.2	343.3	137.8
16	193.9	182.9	235.5	312.1	446.4	372.6	273.1	267.7	363.4	368.3	339.4	138.2
17	226.3	204.0	252.1	327.8	513.7	317.7	266.2	258.1	363.9	384.3	300.0	136.7
18	208.3	173.8	195.0	469.4	402.0	296.5	259.5	260.7	353.2	366.5	300.0	138.2
19	42.4	206.7	182.7	497.5	445.4	483.1	316.5	257.3	348.6	367.9	300.0	137.1
20	206.5	221.0	205.5	432.1	506.3	343.6	301.6	256.5	342.5	364.1	300.0	136.0
21	198.7	190.2	168.6	333.6	406.3	330.1	290.6	258.7	337.1	366.7	300.0	157.5
22	196.6	178.4	175.0	313.7	434.2	330.9	284.8	251.9	335.1	365.6	300.0	192.9
23	191.5	187.3	161.9	318.3	373.3	362.2	281.1	249.0	300.0	365.0	300.0	204.0
24	191.8	163.9	157.6	309.4	495.5	376.8	278.7	246.2	300.0	370.7	300.0	203.8
25	200.4	167.1	191.0	322.8	475.6	366.6	274.1	240.5	300.0	370.4	300.0	206.4
26	193.3	167.8	157.6	367.0	441 0	350 3	0770 0	0.15	222			
27	190.0	147.5	199.5	367.8	441.9	358.1	279.2	247.5	300.0	368.4	300.0	
				307.1	463.5	341.7	282.2	253.5	328.2	372.0	300.0	
28	190.2	141.3	164.6	291.0	520.4	341.1	272.6	263.8	317.6	374.8	225.1	
29	193.2		154.4	306.0	599.9	365.2	264.6	346.4	316.9	374.3	332.9	
30	193.2		178.6	302.2	577.7	392.9	263.0	268.9	318.3	371.8	331.8	
31	195.3		209.8		461.0		264.3	264.7		372.2		
Mean	183.9	175.4	188.4	341.4	423.4	401.7	311.0	264.3	297.4	368.8	336.0	187.9
Min	42.4	141.3	154.4	221.3	277.2	296.5	259.5	215.0	172.8	308.7	225.1	134.2
Max	226.3	221.0	258.1	497.5	599.9	483.1	399.5	381.0	363.9	551.0	442.3	337.9
Acft	11306.1	9738.7	11582.3		26032.3		19120.7		17697.8		19993.3	9314.9

Armual ACFT Total: 207930.3

LOWER JORDAN RIVER HUSTED DAM (SURPLUS CANAL)

COMMON DESCRIPTION: LAT/LON: 40 49 01 N/ 112 00 35 W

DIVERTING WORKS: DIVERSION DAM MEASURING DEVICE: STAFF GAGE RECORDS RATING: Unrated

LOCATION: 414774.82 East, 4518692.03 North (NAD27 UIM Coordinates)

LOC:

XUIM 414774.816 YUIM 4518692.031

The above UIM is the gage station upstream of Huested Dam The flow passing the dam is measured below the dam, with 414765.488 4518751.343

APR MAY JUN JUL AUG SEP

CALENDAR YEAR 2011 Mean daily discharge in CFS

DAY	JAN	FEB	MAR	APR	MAY	JUN	JOL	AUG	SEP	OCT	NOV	DEC
01	89.0	0.0	0.0	44.0	147.0	325.0	420.0	166.3	171.0	90.2	125.0	147.2
02	88.0	0.0	0.0	44.0	105.2	325.0	420.0	120.0	171.0	90.0	125.0	147.0
03	88.0	0.0	0.0	44.0	105.0	325.0	420.0	100.0	171.0	90.0	147.2	147.0
04	88.0	0.0	0.0	44.0	105.0	325.0	420.0	100.0	171.0	90.0	147.0	147.0
05	88.0	0.0	0.0	44.0	86.1	355.0	420.0	100.0	171.0	90.0	147.0	147.0
06	88.0	0.0	0.0	44.0	86.0	355.0	420.0	100.0	170.0	90.0	147.0	147.0
07	88.0	0.0	0.0	44.0	86.0	355.0	420.0	84.1	149.5	90.0	147.0	147.0
08	88.0	0.0	0.0	44.0	125.5	355.0	420.0	84.0	149.0	90.0	147.0	49.0
09	89.0	0.0	0.0	44.0	125.0	355.0	420.0	84.0	149.0	90.0	167.3	49.0
10	88.0	0.0	0.0	44.0	125.0	355.0	420.0	84.0	149.0	90.0	167.0	49.0
11	88.0	0.0	0.0	44.0	125.0	415.8	420.0	84.0	149.0	90.0	167.0	49.0
12	88.0	0.0	0.0	44.0	125.0	415.0	420.0	84.0	149.0	90.0	167.0	49.0
13	88.0	0.0	0.0	44.0	125.0	415.0	420.0	84.0	97.2	90.0	167.0	49.0
14	88.0	0.0	0.0	44.0	125.0	415.0	400.0	84.0	97.0	105.4	180.0	97.6
15	71.5	0.0	0.0	44.0	217.9	415.0	400.0	84.0	97.0	105.0	180.0	97.0
16	71.0	0.0	0.0	44.0	217.0	415.0	400.0	84.0	97.0	105.0	180.0	97.0
17	71.0	0.0	0.0	44.0	217.0	415.0	400.0	84.0	134.4	105.0	180.0	97.0
18	71.0	0.0	0.0	44.0	217.0	415.0	350.0	87.6	134.0	105.0	180.0	97.0
19	71.0	0.0	0.0	44.0	325.9	415.0	350.0	87.0	134.0	105.0	180.0	97.0
20	71.0	0.0	0.0	44.0	325.0	415.0	350.0	87.0	130.0	105.0	180.0	97.0
21	71.0	0.0	0.0	44.0	325.0	415.0	350.0	87.0	130.0	105.0	180.0	97.0
22	71.0	0.0	0.0	44.0	325.0	415.0	350.0	87.0	130.0	105.0	180.0	97.0
23	71.0	0.0	44.7	44.0	325.0	415.0	350.0	87.0	130.0	125.7	180.0	97.0
24	71.0	0.0	44.0	147.0	325.0	415.0	275.0	87.0	90.2	125.0	180.0	97.0
25	71.0	0.0	44.0	147.0	325.0	415.0	275.0	87.0	90.0	125.0	180.0	97.0
26	71.0	0.0	44.0	147.0	325.0	420.0	275.0	87.0	90.0	125.0	180.0	97.0
27	71.0	0.0	44.0	147.0	325.0	420.0	275.0	87.0	90.0	125.0	180.0	97.0
28	71.0	0.0	44.0	147.0	325.0	420.0	200.0	87.0	90.0	125.0	180.0	97.0
29	71.0		44.0	147.0	325.0	420.0	200.0	87.0	90.0	125.0	180.0	97.0
30	71.0		44.0	147.0	325.0	420.0	200.0	87.0	90.0	125.0	180.0	97.0
31	71.0		44.0		325.0		200.0	171.9		125.0		97.0
Mean	78.8	0.0	12.8	68.0	215.8	391.9	356.8	94.0	128.7	104.6	167.6	99.0
Min	71.0	0.0	0.0	44.0	86.0	325.0	200.0	84.0	90.0	90.0	125.0	49.0
Max	89.0	0.0	44.7	147.0	325.9	420.0	420.0	171.9	171.0	125.7	180.0	147.2
Acft	4842.6	0.0	786.9	4048.3	13270.5	23317.3	21937.2	5779.7	7656.8	6429.1	9972.0	6088.8

Annual ACFT Total: 104129.1

LOWER JORDAN RIVER CUDAHEY LANE

COMMON DESCRIPTION: 40 50 29 N/ 111 56 59 W

DIVERTING WORKS: None

MEASURING DEVICE: Flowline Ultrasonic Depth Sensor

RECORDS RATING: Poor

LOCATION: 419855.86 East, 4521414.41 North (NAD27 UIM Coordinates)

MD:

XUIM 419855.863 YUIM 4521414.413

Station operated by Division of Water Rights upstream of Cudahey Lane Bridge. Note: Assume values inserted as 100 CFS used to make record complete when

station is not operating. Example: October 2010

CALENDAR	YEAR	2011	Mean	daily	discharge	in	CFS
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DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
01	73.9	143.0	100.0	100.0	360.5	499.0	313.6	194.5	195.9	199.1	176.1	175.4
02	156.2	140.0	100.0	100.0	353.2	518.2	299.4	213.9	189.3	189.1	189.6	161.1
03	115.6	140.0	100.0	100.0	362.3	503.0	280.6	211.1	199.1	181.8	216.0	184.3
04	138.7	139.0	100.0	100.0	379.3	502.6	251.1	181.8	204.4	179.6	173.2	91.6
05	120.4	141.0	100.0	100.0	477.8	476.4	248.0	188.0	164.7	92.9	135.5	180.4
			20010	200.0	4,,,,	470.4	2.40.0	100.0	104.7	32.3	733.3	TOO.4
06	107.5	141.0	100.0	100.0	479.3	485.6	235.8	190.7	186.3	89.6	165.2	165.5
07	77.3	141.0	100.0	100.0	473.7	506.7	220.4	181.1	190.8	55.9	182.1	172.6
08	92.7	142.0	100.0	100.0	515.4	477.5	257.5	189.6	187.0	149.5	200.9	194.4
09	199.5	137.0	100.0	100.0	516.7	444.7	235.1	178.5	182.5	216.4	184.0	191.2
10	141.0	100.0	100.0	100.0	500.7	472.3	190.9	163.8	166.8	202.8	204.5	188.3
11	140.0	135.0	100.0	100.0	466.6	463.5	230.5	154.8	225.4	174.2	192.7	176.7
12	141.0	135.0	100.0	432.6	485.1	436.8	212.4	180.5	205.7	227.7	45.8	120.4
13	141.0	137.0	100.0	496.2	458.6	447.9	220.4	177.9	210.1	236.5	144.8	37.2
14	43.1	136.0	1.00.0	522.2	472.3	459.2	204.6	172.7	206.9	227.7	166.5	48.8
15	118.9	135.0	100.0	480.6	489.9	430.8	215.5	226.2	215.4	228.8	145.1	79.9
									225.1	220.0		,,,,
16	0.0	97.6	100.0	418.1	514.3	451.1	204.5	193.4	147.7	183.6	183.5	67.9
17	0.0	143.0	100.0	422.9	543.3	380,7	203.3	182.5	213.8	197.3	116.7	129.3
18	5.1	138.0	100.0	508.7	485.9	367.5	183.4	206.5	219.2	223.4	41.8	150.3
19	50.0	141.0	100.0	567.4	544.3	415.5	182.2	216.8	222.5	222.1	147.9	65.2
20	100.0	149.0	100.0	550.9	545.7	356.4	190.5	180.1	220.3	247.1	65.3	77.8
21	100.0	145.0	100.0	464.8	490.8	370.7	199.5	186.7	248.0	229.1	89.9	105.4
22	100.0	141.0	100.0	492.9	515.1	362.4	194.1	173.0	220.9	222.5	160.2	170.1
23	100.0	156.0	100.0	459.0	464.8	382.4	195.5	169.9	214.9	219.9	169.9	152.6
24	100.0	137.0	100.0	463.4	548.6	372.2	202.2	184.8	204.2	209.9	119.7	140.3
25	132.6	100.0	100.0	410.4	552.5	350.4	174.8	198.5	191.0	123.9	108.2	133.7
26	79.5	403.8	100.0	540.9	523.8	344.8	178.9	179.1	212.5	200.5	167.0	139.2
27	175.5	100.0	100.0	467.9	530.7	333.5	193.6	201.9	209.0	196.2	178.3	100.0
28	142.0	100.0	100.0	417.4	548.4	314.6	190.5	183.8	201.0	198.4	146.1	50.2
29	142.0		100.0	480.7	546.2	278.2	189.3	229.5	205.1	147.2	140.0	50.6
30	144.0		100.0	410.9	512.9	308.1	177.3	184.1	195.1	181.9	139.0	57.7
2.5	3.45.0											
31	146.0		100.0		542.5		159.4	179.8		185.0		159.3
Mean	107.2	142.6	100.0	336.9	490.4	417.1	214.0	188.9	201.8	188.4	149.9	126.4
Min	0.0	97.6	100.0	100.0	353.2	278.2	159.4	154.8	147.7	55.9	41.8	37.2
Max	199.5	403.8	100.0	567.4	552.5	518.2	313.6	229.5	248.0	247.1	216.0	194.4
Acft	6592.1	7920.8	6148.8	20048.7	30151.1	24818.6	13159.9	11614.2	12010.9	11582.7	8916.7	7770.4
												_

Annual ACFT Total: 160734.9

LOWER JORDAN RIVER GOGGIN DRAIN (SURPLUS CANAL)

COMMON DESCRIPTION: Goggin Drain Near Magna: Data From USGS 10172630

DIVERTING WORKS:

MEASURING DEVICE:

RECORDS RATING: Unrated

414609.59 East, 4516081.17 North (NAD27 UIM Coordinates) LOCATION:

Goggin Drain Near Magna: Data From USGS 10172630

LOC: XUIM 414609.587 YUIM 4516081.174

CALENDAR YEAR 2011 Mean daily discharge in CFS

DAY	JAN	FEB	MAR	APR	ከተከጎ፣	77.75.7		75 77 77 77	CO CO	0.000		
01	20.0	221.0	1140.0	1160.0	MAY 1390.0	JUN 2220.0	JUL 2290.0	AUG 1560.0	SEP	OCT	NOV	DEC
02	17.0	164.0	1120.0	1160.0				1660.0	899.0	617.0	755.0	660.0
03	17.0	166.0	1120.0	1430.0					852.0	621.0	717.0	648.0
04	18.0	151.0	1120.0	1440.0				1500.0	825.0	616.0	690.0	680.0
05	17.0	141.0	1110.0	1340.0		2050.0		1410.0	816.0	617.0	711.0	598.0
0.5	±/.V	747.0	IIIO.O	7340.0	1230.0	2050.0	2200.0	1360.0	809.0	626.0	782.0	232.0
06	18.0	149.0	1130.0	1260.0	1260.0	2050.0	2240.0	1300.0	815.0	1290.0	719.0	33.0
07	18.0	149.0	1220.0	1250.0	1330.0	2100.0	2240.0	1250.0	797.0	1050.0	713.0	27.0
08	17.0	157.0	1430.0	1510.0	1430.0	2130.0	2230.0	1210.0	751.0	824.0	699.0	22.0
09	16.0	162.0	1440.0	1530.0	1640.0	2150.0	2210.0	1160.0	698.0	793.0	710.0	21.0
10	16.0	153.0	1340.0	1490.0	1680.0	2170.0	2190.0	1090.0	712.0	720.0	715.0	21.0
11	15.0	148.0	1290.0	1360.0	1620.0	2180.0	2180.0	1110.0	798.0	703.0	708.0	17.0
12	14.0	143.0	1240.0	1320.0	1560.0	2190.0	2190.0	1080.0	708.0	702.0	714.0	16.0
13	14.0	144.0	1230.0	1270.0		2210.0		1070.0	704.0	691.0	739.0	14.0
14	15.0	145.0	1240.0	1350.0		2240.0		1060.0	689.0	686.0	725.0	15.0
15	15.0	140.0	1240.0	1260.0		2250.0		1120.0	691.0	683.0	707.0	14.0
							2000,0		032.0	000.0	707.0	14.0
16	15.0	144.0	1250.0	1250.0	1660.0	2270.0	2010.0	1090.0	699.0	687.0	696.0	14.0
17	39.0	166.0	1350.0	1240.0	1700.0	2290.0	1940.0	1050.0	774.0	673.0	703.0	13.0
18	46.0	164.0	1280.0	1330.0	1760.0	2290.0	1880.0	1040.0	757.0	693.0	709.0	12.0
19	45.0	151.0	1270.0	1520.0	1910.0	2300.0	1860.0	1040.0	719.0	707.0	753.0	13.0
20	51.0	230.0	1310.0	1440.0	2090.0	2330,0	1840.0	1030.0	696.0	699.0	725.0	12.0
21	30.0	227.0	1290.0	1460.0	2170.0	2330.0	1780.0	1070.0	682.0	713.0	761.0	36.0
22	26.0	182.0	1280.0	1430.0	2120.0	2310.0	1690.0	943.0	661.0	708.0	749.0	130.0
23	23.0	424.0	1250.0	1390.0	2100.0	2290.0	1600.0	869.0	644.0	706.0	715.0	62.0
24	22.0	928.0	1210.0	1380.0	2130.0	2280.0	1530.0	829.0	635.0	710.0	711.0	86.0
25	22.0	1020.0	1240.0	1380.0	2150.0	2310.0	1460.0	814.0	625.0	702.0	700.0	38.0
26	22.0	1110.0	1240.0	1430.0	2120.0	2320.0	1490.0	823.0	627.0	676.0	673.0	68.0
27	21.0	1150.0	1300.0	1390.0		2330.0	1660.0	822.0	625.0	671.0	681.0	70.0
28	20.0	1110.0	1280.0	1350.0	2070.0	2320.0	1540.0	873.0	625.0	690.0	690.0	71.0
29	20.0		1200.0	1350.0	2150.0	2290.0	1460.0	1090.0	618.0	693.0	690.0	72.0
30	19.0		1160.0	1350.0	2250.0	2280.0	1400.0	952.0	616.0	693.0	688.0	72.0
								332.0	010.0	0,5,5,0	0.00.0	72.0
31	136.0		1130.0		2270.0		1360.0	920.0		700.0		89.0
Mean	25.9	333.5	1240.3	1360.7	1757,4	2228.3	1926.5	1103.1	718.9	721.3	714.9	125.0
Min	14.0	140.0	1110.0	1160.0	1230.0	2050.0	1360.0	814.0	616.0	616.0	673.0	12.0
Max	136.0	1150.0	1440.0	1530.0	2270.0	2330.0	2290.0	1660.0	899.0	1290.0	782.0	680.0
Acft	1594.7	18523.6	76264.5	80965.3	108059.5		118452.9	67824.8	42777.5	44350.4	42541.5	7687.9

Annual ACFT Total: 741637.7

LOWER JORDAN RIVER AMBASSADOR CUT

COMMON DESCRIPTION: LAT/LON: 40 49 34 N/ 112 00 50 W

DIVERTING WORKS:

MEASURING DEVICE: STAFF GAGE & RATED SECTION

RECORDS RATING: Unrated

LOCATION: 414414.59 East, 4519825.35 North (NAD27 UIM Coordinates)

Div:

XUTM 414414.588 YUTM 4519825.347

MD:

414357.248 4519979.314

CALENDAR YEAR 2011 Mean daily discharge in CFS

DAY	JAN	FEB	MAR	APR	MAY	NUL	JUL	AUG	SEP	OCT	VOV	DEC
01	49.00	0.00	0.00	0.00	64.00	118.00	135.00	48.70	72.00	42.62	49.00	56.71
02	49.00	0.00	0.00	0.00	57.40	118.00	135.00	48.00	72.00	42.00	49.00	56.00
03	49.00	0.00	0.00	0.00	57.00	118.00	132.00	48.00	72.00	42.00	56.71	56.00
04	49.00	0.00	0.00	0.00	57.00	118.00	132.00	48.00	72.00	42.00	56.00	56.00
05	49.00	0.00	0.00	0.00	41.84	133.73	132.00	46.00	70.00	42.00	56.00	56.00
06	49.00	0.00	0.00	0.00	41.00	133.00	132.00	46.00	70.00	42.00	56.00	56.00
07	49.00	0.00	0.00	0.00	41.00	133.00	132.00	42.10	64.48	42.00	56.00	56.00
80	49.00	0.00	0.00	0.00	56.54	133.00	132.00	42.00	64.00	42.00	56.00	18.73
09	41.84	0.00	0.00	0.00	56.00	133.00	132.00	42.00	64.00	42.00	64.55	18.00
10	41.00	0.00	0.00	0.00	56.00	133.00	132.00	42.00	64.00	42.00	64.00	18.00
11	41.00	0.00	0.00	0.00	56.00	133.00	128.00	42.00	64.00	42.00	64.00	18.00
12	41.00	0.00	0.00	0.00	56.00	133.00	128.00	42.00	64.00	42.00	64.00	18,00
13	41.00	0.00	0.00	0.00	56.00	133.00	128.00	42.00	49.10	42.00	64.00	18.00
14	41.00	0.00	0.00	0.00	56.00	133.00	128.00	42.00	49.00	42.03	68.52	18.00
15	41.84	0.00	0.00	0.00	90.02	133.00	101.00	42.00	49.00	42.00	68.00	45.42
16	41.00	0.00	0.00	0.00	90.00	133.00	101.00	42.00	49.00	42.00	68.00	45.00
17	41.00	0.00	0.00	0.00	90.00	133.00	75,00	42.00	56.71	42.00	68.00	45.00
18	41.00	0.00	0.00	0.00	90.00	133.00	75.00	35.27	56.00	42,00	68.00	45.00
19	41.00	0.00	0.00	0.00	118.34	133.00	75.00	35.00	56,00	42.00	68.00	45.00
20	41.00	0.00	0.00	0.00	118.00	133.00	55.00	35.00	50.00	42.00	68.00	45.00
21	41.00	0.00	0.00	0.00	118.00	133.00	55.00	35.00	50.00	42.00	68.00	45.00
22	41.00	0.00	0.00	0.00	118.00	133.00	55.00	35.00	50.00	42.00	68.00	45.00
23	41.00	0.00	0.00	0.00	118.00	135.00	55.00	35.00	50.00	49.49	68.00	45.00
24	41.00	0.00	0.00	64.42	118.00	135.00	55.00	35.00	42.62	49.00	68.00	45.00
25	0.00	0.00	0.00	64.00	118.00	135.00	55.00	35.00	42.00	49.00	68.00	45.00
26	0.00	0.00	0.00	64.00	118.00	135.00	55.00	35.00	42.00	49.00	68.00	45.00
27	0.00	0.00	0.00	64.00	118.00	135.00	55.00	35.00	42.00	49.00	68.00	45.00
28	0.00	0.00	0.00	64.00	118.00	135.00	55.00	35.00	42.00	49.00	68.00	45.00
29	0.00		0.00	64.00	118.00	135.00	55.00	35.00	42.00	49.00	68.00	45.00
30	0.00		0.00	64.00	118.00	135,00	55.00	35.00	42.00	49.00	68.00	45.00
31	0.00		0.00		118.00		55.00	72.79		49.00		45.00
Mana	32.00	0.00	0.00	24.0=			o					
Mean Min	33.86 0.00	0.00	0.00	14.95	85.36	131.56	94.35	41.12	55.73	44.07	63.73	41.45
		0.00	0.00	0.00	41.00	118.00	55.00	35.00	42.00	42.00	49.00	18.00
Max	49.00	0.00	0.00	64.42	118.34	135.00	135.00	72.79	72.00	49.49	68.52	56.71
Acft	2082.01	0.00	0.00	889.43	5248.54	7828.22	5801.65	2528.65	3316.18	2709.70	3791.96	2548.48

Annual ACFT Total: 36744.83

LOWER JORDAN RIVER AT 17TH SOUTH

COMMON DESCRIPTION: LAT/LON: 40 44 00 N/ 111 55 20 W

DIVERTING WORKS: Radial Gates on Surplus Canal provide river flow

MEASURING DEVICE: USGS Gauge staion & Pressure sensor

RECORDS RATING: Poor

LOCATION: 422101.12 East, 4509391.83 North (NAD27 UIM Coordinates)

This gage is being reported by USGS Station 10171000 as: Lower Jordan at 1700 South. This gauge measures flow in the Lower Jordan diverted through radial gates, from the surplus canal feeder at 21st south (USGS Report of Provisional Data Subject to Revision.)

MD:

XUIM 422101.124 YUIM 4509391.829

CALENDAR YEAR 2011 Mean daily discharge in CFS

01													
02 143.0 140.0 145.0 139.0 11.0 13.0 159.0 183.0 194.0 263.0 275.0 253.0 03 144.0 140.0 146.0 158.0 9.2 12.0 160.0 176.0 195.0 262.0 272.0 254.0 04 143.0 139.0 146.0 150.0 41.0 9.9 162.0 173.0 197.0 262.0 275.0 214.0 05 143.0 141.0 144.0 148.0 95.0 7.5 161.0 171.0 195.0 265.0 281.0 198.0 06 142.0 141.0 144.0 144.0 70.0 7.2 161.0 166.0 193.0 271.0 273.0 137.0 08 142.0 141.0 144.0 149.0 56.0 6.9 163.0 166.0 193.0 271.0 273.0 137.0 09 143.0 137.0 127.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 10	DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
03 144.0 140.0 146.0 158.0 9.2 12.0 160.0 176.0 199.0 262.0 272.0 254.0 04 143.0 139.0 146.0 150.0 41.0 9.9 162.0 173.0 197.0 262.0 275.0 214.0 05 143.0 141.0 144.0 148.0 95.0 7.5 161.0 171.0 195.0 265.0 281.0 198.0 06 142.0 141.0 144.0 144.0 70.0 7.2 161.0 168.0 196.0 303.0 275.0 146.0 07 142.0 141.0 144.0 149.0 56.0 6.9 163.0 166.0 193.0 271.0 273.0 137.0 08 142.0 142.0 140.0 162.0 35.0 6.7 161.0 164.0 187.0 275.0 253.0 117.0 09 143.0 137.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 10 141.0													
04 143.0 139.0 146.0 150.0 41.0 9.9 162.0 173.0 197.0 262.0 275.0 214.0 05 143.0 141.0 144.0 148.0 95.0 7.5 161.0 171.0 195.0 265.0 281.0 198.0 06 142.0 141.0 144.0 144.0 70.0 7.2 161.0 168.0 196.0 303.0 275.0 146.0 07 142.0 141.0 144.0 149.0 56.0 6.9 163.0 166.0 193.0 271.0 273.0 137.0 08 142.0 140.0 162.0 35.0 6.7 161.0 164.0 187.0 275.0 253.0 117.0 09 143.0 137.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 10 141.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0													
05 143.0 141.0 144.0 148.0 95.0 7.5 161.0 171.0 195.0 265.0 281.0 198.0 06 142.0 141.0 144.0 144.0 70.0 7.2 161.0 168.0 196.0 303.0 275.0 146.0 07 142.0 141.0 144.0 149.0 56.0 6.9 163.0 166.0 193.0 271.0 273.0 137.0 08 142.0 142.0 140.0 162.0 35.0 6.7 161.0 164.0 187.0 275.0 253.0 117.0 09 143.0 137.0 127.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 141.0 136.0 122.0 131.0 15.0 7.2 164.0 159.0 165.0 273.0 252.0 108.0 11 140.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 141.0 135.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 112.0 15.0 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 15.0 143.0 112.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 112.0 18 146.0 138.0 138.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 274.0 262.0 113.0 18 146.0 138.0 138.0 109.0 130.0 9.9 7.3 144.0 189.0 267.0 274.0 262.0 112.0 18 146.0 138.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 18 146.0 138.0 109.0 130.0 14.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 19 154.0 149.0 149.0 149.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 19 154.0 149.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 114.0 145.0 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 114.0 144.0 145.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 266.0 163.0 144.0 145.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0 163.0 141.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0 163.0 144.0 144.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0 163.0 144.0 144.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0 163.0 144.0 144.0 109.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0 163.0 144.0 144.0													
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07 142.0 141.0 144.0 149.0 56.0 6.9 163.0 166.0 193.0 271.0 273.0 137.0 08 142.0 142.0 140.0 162.0 35.0 6.7 161.0 164.0 187.0 275.0 253.0 117.0 09 143.0 137.0 127.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 10 141.0 136.0 122.0 131.0 15.0 7.2 164.0 159.0 165.0 273.0 252.0 108.0 11 140.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 141.0	06	142.0	141.0	144.0	144.0	70.0	7.2	161.0	168.0	196.0	303.0	275.0	146.0
09 143.0 137.0 127.0 137.0 18.0 7.1 159.0 162.0 186.0 272.0 243.0 110.0 10 141.0 136.0 122.0 131.0 15.0 7.2 164.0 159.0 165.0 273.0 252.0 108.0 11 140.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 121.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 112.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 112.0 16 141.0 137.0 112.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 112.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 274.0 262.0 114.0 19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 19 154.0 149.0 109.0 81.0 25.0 36.0 170.0 188.0 272.0 285.0 270.0 129.0 21 144.0 145.0 109.0 81.0 25.0 36.0 170.0 188.0 272.0 285.0 270.0 129.0 22 143.0 141.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 165.0	07	142.0	141.0	144.0	149.0	56.0	6.9	163.0	166.0	193.0	271.0	273.0	137.0
10 141.0 136.0 122.0 131.0 15.0 7.2 164.0 159.0 165.0 273.0 252.0 108.0 11 140.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 14 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 111.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 113.0 17 151.0 143.0 112.0 124.0 15.0 7.7 137.0 188.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0	08	142.0	142.0	140.0	162.0	35.0	6.7	161.0	164.0	187.0	275.0	253.0	117.0
10 141.0 136.0 122.0 131.0 15.0 7.2 164.0 159.0 165.0 273.0 252.0 108.0 11 140.0 135.0 121.0 125.0 11.0 7.7 163.0 152.0 124.0 277.0 257.0 108.0 12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 14 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 111.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 112.0 17 151.0 143.0 112.0 124.0 15.0 7.7 137.0 188.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 274.0 262.0 114.0 19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 116.0 19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 140.0 140.0 140.0 140.0 140.0 140.0 180.0 170.0 187.0 274.0 280.0 267.0 114.0 140.0 140.0 140.0 140.0 140.0 140.0 140.0 140.0 180.0 170.0 187.0 274.0 280.0 267.0 114.0 140.0 140.0 140.0 140.0 140.0 140.0 140.0 180.0 170.0 187.0 274.0 280.0 267.0 114.0 140.0 14	09	143.0	137.0	127.0	137.0	18.0	7.1	159.0	162.0	186.0	272.0	243.0	110.0
12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 14 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 111.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 113.0 17 151.0 143.0 112.0 124.0 15.0 7.7 137.0 188.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 19 <td< td=""><td>10</td><td>141.0</td><td>136.0</td><td>122.0</td><td>131.0</td><td>15.0</td><td>7.2</td><td>164.0</td><td>159.0</td><td>165.0</td><td>273.0</td><td>252.0</td><td>108.0</td></td<>	10	141.0	136.0	122.0	131.0	15.0	7.2	164.0	159.0	165.0	273.0	252.0	108.0
12 141.0 135.0 115.0 126.0 8.1 7.6 152.0 173.0 254.0 275.0 260.0 109.0 13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 14 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 111.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 113.0 17 151.0 143.0 112.0 124.0 15.0 7.7 137.0 188.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 19 <td< td=""><td>11</td><td>140.0</td><td>135.0</td><td>121.0</td><td>125.0</td><td>11.0</td><td>7.7</td><td>163.0</td><td>152.0</td><td>124 0</td><td>277 0</td><td>257 0</td><td>108.0</td></td<>	11	140.0	135.0	121.0	125.0	11.0	7.7	163.0	152.0	124 0	277 0	257 0	108.0
13 141.0 137.0 112.0 124.0 8.2 6.9 145.0 179.0 252.0 273.0 262.0 112.0 14 141.0 136.0 110.0 130.0 9.9 7.3 144.0 185.0 259.0 275.0 260.0 111.0 15 141.0 135.0 109.0 124.0 11.0 7.4 142.0 192.0 266.0 272.0 262.0 112.0 16 141.0 137.0 111.0 124.0 9.4 7.5 141.0 189.0 267.0 274.0 262.0 113.0 17 151.0 143.0 112.0 124.0 15.0 7.7 137.0 188.0 276.0 274.0 262.0 114.0 18 146.0 138.0 109.0 130.0 14.0 7.4 138.0 187.0 276.0 281.0 262.0 114.0 19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 <td></td>													
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19 154.0 141.0 108.0 134.0 18.0 19.0 149.0 188.0 275.0 282.0 265.0 115.0 20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 21 144.0 145.0 107.0 10.0 17.0 50.0 168.0 188.0 272.0 285.0 270.0 129.0 22 143.0 141.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0		151.0	143.0	112.0	124.0	15.0	7.7	137.0	188.0	276.0	274.0	262.0	114.0
20 147.0 149.0 109.0 81.0 25.0 36.0 170.0 187.0 274.0 280.0 267.0 114.0 21 144.0 145.0 107.0 10.0 17.0 50.0 168.0 188.0 272.0 285.0 270.0 129.0 22 143.0 141.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0				109.0	130.0	14.0	7.4	138.0	187.0	276.0	281.0	262.0	114.0
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22 143.0 141.0 109.0 8.7 15.0 65.0 165.0 185.0 271.0 280.0 266.0 163.0	20	147.0	149.0	109.0	81.0	25.0	36.0	170.0	187.0	274.0	280.0	267.0	114.0
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26 142.0 122.0 102.0 12.0 11.0 106.0 167.0 185.0 268.0 280.0 254.0 172.0	26	140.0	100.0	102.0	10.0	77.0	100.0	167 0	3.0m. o	0.60.0			
			112.0										171.0
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31 146.0 138.0 21.0 165.0 197.0 281.0 167.0	31	146.0		138.0		21.0		165.0	197.0		281.0		167.0
Mean 143.2 137.1 119.4 92.8 22.3 42.4 158.6 181.1 236.6 276.4 263.5 152.9	Mean	143.2	137.1	119.4	92.2	22.3	42.4	158 6	181 1	236 6	276 4	263 5	152.9
													108.0
manip maxip maxip maxip model													254.0
													9399.7

Annual ACFT Total: 110207.2

LOWER JORDAN RIVER 21ST SOUTH DAM (SURPLUS CANAL)

COMMON DESCRIPTION: 40 43 28 N/ 111 55 35 W

DIVERTING WORKS: Located Below Dam near Jordan River diversion

MEASURING DEVICE: USGS GAGING STATION

RECORDS RATING: Fair

YUIM 4508634.668

LOCATION: 421819.47 East, 4508634.67 North (NAD27 UIM Coordinates)

This gauge is being reported by USGS Station 10170500 as: SURPLUS CANAL at 21st south dam. This measures flow past the dam to the surplus canal. (USGS report of Provisional data subject to revision.) MD: XUIM 421819.466

CALENDAR YEAR 2011 Mean daily discharge in CFS

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
01	143.0	174.0	1000.0	1200.0	1480.0	2190.0	2870.0	1850.0	1100.0	855.0	1050.0	867.0
02	196.0	166.0	1100.0	1180.0	1410.0	2190.0	2770.0	1650.0	1050.0	847.0	906.0	904.0
03	201.0	142.0	1100.0	1640.0	1440.0	2120.0	2800.0	1540.0	1030.0	831.0	931.0	909.0
04	190.0	114.0	1090.0	1340.0		2080.0	2770.0	1460.0	1020.0	862.0	948.0	412.0
05	184.0	123.0	1100.0	1310.0		2110.0	2650.0	1420.0	1020.0	914.0	1030.0	268.0
									m		2000.0	200.0
06	179.0	128.0	1130.0	1230.0	1370.0	2330.0	2740.0	1340.0	1020.0	1800.0	906.0	157.0
07	170.0	128.0	1330.0	1330.0	1460.0	2440.0	2730.0	1290.0	993.0	1050.0	906.0	133.0
08	178.0	157.0	1450.0	1630.0	1700.0	2450.0	2620.0	1260.0	909.0	1020.0	925.0	126.0
09	170.0	145.0	1280.0	1560.0	2120.0	2550.0	2500.0	1220.0	907.0	964.0	940.0	123.0
10	155.0	136.0	1260.0	1440.0	1860.0	2540.0	2540.0	1170.0	925.0	949.0	937.0	123.0
11	142.0	127.0	1250.0	1350.0	1820.0	2530.0	2580.0	1170.0	971.0	927.0	932.0	118.0
12	144.0	129.0	1210.0	1340.0	1750.0	2680.0	2530.0	1120.0	893.0	916.0	888.0	114.0
13	146.0	131.0	1200.0	1320.0	1780.0	2730.0	2400.0	1100.0	893.0	901.0	908.0	160.0
14	152.0	128.0	1220.0	1390.0	1890.0	2770.0	2320.0	1100.0	866.0	885.0	897.0	138.0
15	146.0	126.0	1200.0	1290.0	1980.0	2860.0	2190.0	1190.0	869.0	886.0	912.0	121.0
16	158.0	134.0	1220.0	1290.0	2150.0	3030.0	2050.0	1140.0	926.0	892.0	880.0	111.0
17	280.0	177.0	1290.0	1300.0	2240.0	2930.0	1940.0	1100.0	998.0	868.0	869.0	112.0
18	224.0	142.0	1230.0	1540.0	2280.0	2770.0	1960.0	1090.0	955.0	933.0	850.0	110.0
19	330.0	171.0	1230.0	1660.0	2610.0	3290.0	2010.0	1090.0	894.0	942.0	850.0	112.0
20	237.0	254.0	1280.0	1550.0	2660.0	3180.0	1990.0	1100.0	892.0	942.0	844.0	106.0
21	208.0	192.0	1230.0	1610.0		2810.0	1850.0	1120.0	893.0	968.0	1030.0	101.0
22	199.0	159.0	1240.0	1570.0	2230.0	2710.0	1730.0	1070.0	873.0	951.0	946.0	182.0
23	188.0	150.0	1180.0	1530.0	2350.0	2840.0	1670.0	1030.0	870.0	936.0	939.0	235.0
24	183.0	1000.0	1170.0	1540.0	2540.0	3120.0	1620.0	1000.0	854.0	925.0	980.0	252.0
25	189.0	1000.0	1230.0	1550.0	2300.0	3070.0	1600.0	956.0	843.0	922.0	966.0	246.0
26	185.0	1000.0	1200.0	1660.0	2270.0	3040.0	1750.0	987.0	866.0	875.0	925.0	254.0
27	179.0	1000.0	1200.0	1460.0	2190.0	2930.0	1750.0	988.0	850.0	868.0	954.0	261.0
28	172.0	1000.0	1200.0	1460.0	2200.0	2780.0	1630.0	1120.0	853.0	918.0	964.0	257.0
29	172.0		1200.0	1450.0	2970.0	2860.0	1560.0	1370.0	849.0	904.0	959.0	258.0
30	172.0		1200.0	1550.0	2760.0	2920.0	1490.0	1120.0	849.0	922.0	968.0	257.0
31	175.0		1200.0		2290.0		1470.0	1110.0		929.0		277.0
Mean	185.4	301.2	1207.1	1442.3	2033.9	2695.0	2163.9	1202.3	924.4	945.2	931.3	251.7
Min	142.0	114.0	1000.0	1180.0	1310.0	2080.0	1470.0	956.0	843.0	831.0	844.0	101.0
Max	330.0	1000.0	1450.0	1660.0	2970.0	3290.0	2870.0	1850.0	1100.0	1800.0	1050.0	909.0
Acft	11399.0	16726.6	74221.5	85824.8	125057.8	160363.6	133051.2	73925.9	55003.6	58119.7	55418.2	15479.0

Annual ACFT Total: 864591.0

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DATE	DESCRIPTION OF ACTION TAKEN
01/02/11	Checked the water at Goggin and Husted Dam and Ambassador Cut
01/09/11	Checked water
01/15/11	Checked water
01/20/11	Lower Jordan meeting
1/22/11	Checked water
01/29/11	Check water
01/31/11	Opened 6 bay' on the Goggin
02/10/11	Meeting at the Rudy on water from Kennecott
02/13/11	Checked water
02/22/11	John at Utah Lake called and is releasing water
02/23/11	Closed Jordan River down 2" and returned in the evening and closed another 3"
02/24/11	Opened river at 2100 S. for 150 C.F.S
02/24/11	Opened gate on Goggin
02/26/11	Cut and installed boards in dam
03/01/11	Opened and then closed gates at 2100 S. to release debris
03/08/11	Called Flood Control because the Goggin was plugged
03/09/11	Checked Goggin and it had been cleaned
03/23/11	Opened up dam for Rudy to start filling
03/30/11	Opened river 2100 S. for Beau on the New State
04/16/11	Meeting at the North Point Duck Club regarding flooding
04/18/11	Checked dam for flooding
04/20/11	City called on closing the river at 2100 S. due to heavy rain
04/23/11	Sand bagged the Husted Dam with help from the duck clubs.
04/23/11	Checked water
04/27/11	Meeting with Kennecott water at 90 th south
05/02/11	Checked water
05/04/11	Re-opened the river from 4/20 released 50 C.F.S
05/05/11	Checked water
05/08/11	Checked water
05/09/11	Checked water
05/15/11	Checked water
05/16/11	Cleaned out the Goggin with the backhoe
05/18/11	Cleaned out the Goggin with the backhoe and checked dam for flooding
05/19/11	Checked Goggin for debris water is now in the sand bags at Husted Dam
05/19/11	West side road is under 8" of water
05/23/11	Checked Goggin
05/29/11	Cleaned Goggin with backhoe
05/30/11	Checked all water
05/31/11	Check all water

06/20/11	Cleaned Goggin and Hustad Dam with backhoe
06/20/11	Opened river back up to 50 C.F.S
06/21/11	Released a little more water from river
06/22/11	Opened up river more
06/28/11	Opened river
07/07/11	Checked water
07/12/11	Checked water
07/19/11	Released more water into the river
07/25/11	Installed lumber in the Ambassador Cut
08/01/11	Checked water
08/02/11	Checked river on 2100 S.
08/07/11	Checked water
08/09/11	Pulled wood out of the dam
08/11/11	Removed debris in river and turned in more water for the New State
08/13/11	Released more water in the river
08/15/11	North Point came and helped put in lumber
08/18/11	Checked water
08/22/11	Used backhoe at the Goggin to clean and pull bays open
08/27/11	Released more water in the river
08/31/11	Checked water
09/10/11	Received a call the water in the river was closed from oil spill
09/11/11	Re-opened water on the river
09/17/11	Checked water
09/23/11	Checked water
09/28/11	Checked water
10/06/11	Closed river due to heavy rain and opened the Goggin 5 bays
10/07/11	Opened the river back up and closed 3 bays on the Goggin
10/07/11	Closed 48" gate on North Point
10/08/11	Checked Goggin
10/17/11	Received a call from John Larson he is closing the river for one day to remove debris
10/23/11	Checked water
11/09/11	Checked Goggin
11/10/11	Opened up the river 1"
11/14/11	Checked water
12/02/11	John Larson called and turning the river off for 8 day's for work. I called Flood
	Control and the all of the duck clubs

Deseret News

Breaches will ease bigger flood concerns to canal, pond in Salt Lake, Davis counties

Published: Wednesday, May 11, 2011 5:08 p.m. MDT

NORTH SALT LAKE — In anticipation of heavy spring runoff, an elaborate system of dikes, ditches and ponds in Salt Lake and Davis counties will be deliberately breached, allowing water to flow through thousands of acres of prime waterfowl land along the shores of the Great Salt Lake.

The man-made alterations to dikes and other water control features will be done to make sure the Goggin Drain — which is a canal that takes the water off the Jordan River surplus canal — doesn't get overwhelmed from high flows brought on by an overwhelmingly plentiful year for snowpack and ultimately result in more substantial and disastrous flooding.

Farther north, those same concerns about flooding have officials considering when to breach the dike on the west shores of Centerville Pond, so that it doesn't become inundated and flood east side areas, including an industrial park, when the runoff hits.

If flows exceed 3,000 feet per cubic second at the Goggin — where it is now running at about 2,000 cfs — it could compromise a dam, overwhelming any of the systems in place that direct water into the Great Salt Lake.

The Goggin, one of those systems, conveys water from the surplus canal to the Great Salt Lake, bypassing farm fields, several thousand acres of duck club property and the Farmington Bay waterfowl management area.

If the dam fails, the water would all at once rush through the duck clubs, rather than directing it out west through the Goggin Drain.

The dike at the duck clubs — such as North Point and Rudy — as well as Farmington Bay can only handle flows at a certain rate, said Jeff Richards, president of the Utah Waterfowl Association.

Both he and Rich Hansen, head of the Farmington Bay Waterfowl management area, said it is better to make the cuts or breaches now than to deal with uncontrolled amounts of water later. That includes what needs to be done at Centerville Pond.

"If we leave it, it will have more than one breach in the dike," Hansen said. "With the sheer volume of water coming, there is a lack of ability to get rid of that much water."

The dike impoundments are shored up with boards, which can be removed to facilitate water moving through the waterfowl areas as flows increase, Richards said.

"We are not there yet," he said. "We have not pulled boards as of this point."

The tricky part of making the breaches will involve the timing on when to make the repairs.

Richards said the fixes need to be made to preserve the ideal amount of water in the wetlands in the dry months to come and also in time to discourage the growth of phragmites, the "common reed" native to Utah that is a greedy grower crowding out other plants.

"If we have ponds that are just wet and not held up to a certain level, we will have the phragmite germinate."

High flows are also being watched closely in Centerville because of a situation that, if not managed properly, could prove costly when rapid runoff hits.

Randy Richards, Centerville's public works director, said the streams that flow through the city and into the Centerville Pond will have to pass through a culvert not sufficient enough to handle an anticipated flow of 1,300 cubic feet per second.

Rocky Mountain Power built the dike impounding the pond in 1987 to keep the Great Salt Lake from moving any further east and taking out power lines.

By breaching it on the west side, the water will flow to the Great Salt Lake, instead of backing up to the east and flooding an industrial park, a power substation or even Legacy Highway, Hansen said.

Hansen, who works for the state Division of Wildlife Resources, said there have been talks with the utility company about putting in a larger culvert in the future so the pond's dike will not have to be breached during high flow years.

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